



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/000,359	12/04/2001	Joel F. Holthaus	N1086-073	9781
7590	04/19/2004		EXAMINER	KRUSE, DAVID H
Robert E. Hanson FULBRIGHT & JAWORSKI L.L.P. 600 Congress Avenue Suite 2400 Austin, TX 78701			ART UNIT	PAPER NUMBER
			1638	
DATE MAILED: 04/19/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/000,359	HOLTHAUS, JOEL F.
Examiner	Art Unit	
David H Kruse	1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 26 January 2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-19, 21, 24, 26-28, 30 and 31 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) 1-5, 7, 8, 11 and 19 is/are allowed.

6) Claim(s) 6, 9, 10, 12-19, 21, 24, 26-28, 30 and 31 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____.

STATUS OF THE APPLICATION

1. This Office action is in response to the Amendment and Response filed 26 January 2004.
2. Claims 20, 22, 23, 25, 29 and 32 have been cancelled.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Those rejections not specifically addressed in this Office action are withdrawn in view of Applicant's amendments to the claims.
5. The rejections of the claims under 35 USC § 112, first paragraph, as lacking enablement because of the necessity to making a deposit of biological material is herein withdrawn. Applicant's statement on pages 13-14 of the response as to the nature of the deposit, and Applicant's statement on page 34 of the specification as to removal of any restrictions to such a deposit upon allowance of the claims is deemed sufficient for the purpose of overcoming this rejection.

Claim Rejections - 35 USC § 112

6. Claims 6, 9, 10, 24, 30 and 31 remain rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This rejection is repeated for the reason of record as set forth in the last Office action mailed 6 November 2003. Applicant's arguments filed 26 January 2004 have been fully considered but they are not persuasive.

Claim 6 remains indefinite in view of Applicant's amendment because the corn plant of claim 2 is not taught in the specification as comprising a gene conferring male sterility, hence, the metes and bounds of the invention are unclear. It is suggested that the instant claim be rewritten as a product-by-process wherein the corn plant of claim 2 is transformed with a transgene that encodes a male sterility characteristic.

Claims 9 and 10 remain indefinite because the limitation "corn inbred LH322" renders the claim indefinite because said limitation is not an art recognized designation of a corn inbred and hence does not state the metes and bounds of the claimed invention. Applicant argues that the term is fully defined in view of the description in the specification and proffered deposit of seed and recitation of an ATCC accession number in claim 1 (paragraph spanning pages 7-8 of the Response). This argument is not found to be fully persuasive because the sole designation of a plant by its breeding line name or number is arbitrary and creates ambiguity in the claims. For example, the plant disclosed in this application could be designated by some other arbitrary means, or the assignment of the breeding line name could be arbitrarily changed to designate another plant. If either event occurs, one's ability to determine the metes and bounds of the claim would be impaired. See *In re Hammack*, 427 F.2d 1378, 1382; 166 USPQ 204, 208 (CCPA 1970). Amendment of the claims to refer to the deposit accession number of the exemplified breeding line, in the instant case, would obviate this rejection.

Claim 24 remains indefinite because it is unclear where in the method of claim 19 that one of skill in the art is to practice the "plant tissue culture methods" or how such methods are to be utilized [sic] to derive progeny. Applicant argues that the claim refers

to deriving progeny of "said LH322-derived corn plant" which is the result of the last step in claim 19 and that there is no indefiniteness as to when the tissue culture methods are used. Applicant argues that the methods could only be used after step (b) is completed, since it is only after this step that there is a LH322-derived corn plant" in accordance with claim 19. Applicant argues that utilizing plant tissue culture methods to derive progeny denotes a positive action and the limitation to plant tissue culture methods fully defines what this positive action is (page 8 of the Response). These arguments are not found to be persuasive because it is unclear how utilizing plant tissue culture methods is performed to derive progeny, if such progeny are clones of said progeny, if the methods encompass an embryo rescue method to produce an interspecies hybrid, or in general what the metes and bounds of utilizing are.

Claim 30 remains indefinite because at line 3, the limitation "using the corn plant, or its parts, of claim 2" is indefinite because it is unclear what the metes and bounds of "using" are in the instant case. Claim 31 remains indefinite because such limitations as "restriction fragment length polymorphism enhance selection", "genetic marker enhanced selection" and "transformation" do not further define using a corn plant as a source of breeding material, hence the metes and bounds of the claim are unclear.

Applicant argues, at claim 30, that use of a plant as a source of breeding material in a corn plant breeding program is a well known process in the art that forms the basis of how new corn inbreds are made, that this is set forth at pages 2-4 of the specification and that such a positive limitation is readily understood by one of skill in the art (page 9 of the Response). This argument is not found to be persuasive because the

specification at pages 2-4 give general teachings of specific plant breeding methods and does not teach the metes and bound of the claimed method. The instant claims(s) is(are) directed to using a corn plant as a source of material in a breeding program using plant breeding techniques, such a use could encompass using multiple methods in multiple combinations, without a specifically defined method in the instant claims, one of skill in the art would not understand the metes and bounds of the claimed method.

Applicants argue that as the recited techniques are among the many known plant breeding processes but what was not known is corn variety LH322, and thus the ability to use this variety in such known breeding processes, reciting these techniques further defines the method of main claim 30 and as the recited techniques are known to those of skill in the art and further defines the scope of the claim, and no basis has been provided to conclude otherwise (paragraph spanning pages 9-10 of the specification). This argument is not found to be persuasive because “restriction fragment length polymorphism enhance selection”, “genetic marker enhanced selection” and “transformation” do not denote a plant breeding technique but would be used as a step in a technique. In the instant case the method of claims 30 and 31 is not sufficiently defined such that one of skill in the art would understand the metes and bounds of the claimed invention in light of just these process steps.

7. Claims 6, 12-18, 21, 24 26-28, 30 and 31 remain rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the

time the application was filed, had possession of the claimed invention. This rejection is repeated for the reason of record as set forth in the last Office action mailed 6 November 2003. Applicant's arguments filed 26 January 2004 have been fully considered but they are not persuasive.

Applicant argues that the claimed subject matter has been described in full compliance with the first paragraph of 35 USC § 112 because the specification provides a description of sufficient structural characteristics of hybrid plants having inbred corn plant LH322 as one parent to satisfy the written description requirement. Applicant argues that the specification describes, in Tables 1-4, four hybrids that were produced using LH322 as one parent, described in the tables are the mean yield, percentage moisture, stalk lodging, root lodging, percent of dropped ears, plant height and ear height for these hybrids. Applicant argues that while the claims are directed to a genus of plants, these three hybrids constitute a representative set of species describing the genus based on the shared structural characteristics of the members of the genus (paragraph spanning pages 10-11 of the Response). This argument is not found to be persuasive because the specification states that the breeder's selection occurs in unique environments, with no control at the DNA level (using conventional breeding procedures), and with millions of different possible genetic combinations being generated, a breeder of ordinary skill in the art cannot predict the final resulting lines he develops, except possibly in a very gross and general fashion (pages 2-3 of the specification). While this statement was made in light of developing a unique inbred corn line, it also shows that the description of three hybrids does not describe the

millions of different genetic combinations possible using the exemplified LH322 inbred corn line as one of the parents.

Applicant argues that because corn plant LH1322 is an inbred corn plant, all hybrid plants having LH322 as a parent will contain the same genetic contribution from LH322 and thus will be genetically distinct and identifiable from any other corn plant on this basis and that because LH322 is an inbred corn plant, all hybrid corn plants derived therefrom must inherit exactly half of the genetic material of corn plant LH322.

Applicant argues that all hybrid plants derived from LH322 will thus be genetically identical with respect to this genetic contribution and that the Federal Circuit has noted that such shared structural features possessed by members of a genus is important to the written description requirement, citing *The Regents of The University of California v. Eli Lilly and Co.*, 119 F.3d 1559, 1568; 43 USPQ2d 1398, 1406 (Fed. Cir. 1997).

Applicant further argues that all of the members of the claimed genus of hybrids having LH322 as one parent share the structural feature of having the genetic complement of LH322 and that one of skill in the art could thus readily identify the members of the genus (page 11 of the Response). In the case of *The University of California v. Eli Lilly and Co* the court stated that a description of a process of isolating a cDNA from an organism and a description of the encoded protein does not constitute an adequate written description of the cDNA, in the instant case, applicant only describes phenotypic traits of the exemplified LH322 inbred corn plant and not the genetic complement thereof.

Applicant argues that a corn plant LH322 which has been transformed with one or more transgenes are fully described by way of the description of corn plant LH322 and representative transgene species, including the accompanying phenotypic effect of the transgenes (page 12 of the Response). This argument is not found to be persuasive because the genus of transgenes is not adequately described in those claims directed to a transgenic LH322 corn plant and methods of making. At claims 26-28 and 31, the effect of transgenes on the physiological and morphological characteristic of a transgenic LH322 corn plant or progeny thereof, is not sufficiently described where by one of skill in the art could recognize the transgenic corn plant as broadly claimed.

Applicants argue that while they have not described every possible single species of transgenes introduced into LH322, this is not required to provide a written description of a genus (page 13 of the Response). The teachings of *In re Baird* (CA FC) 29 USPQ2d 1550 does not appear to be relevant to the instant argument since that discussion is directed to the obviousness of a group of chemical compound species in light of the disclosure of a generic group of compounds and their use. In the instant case Applicant has failed to adequately describe what effect the genus of transgenes encompassed by the claims would have on the exemplified LH322 inbred corn line.

Claim 6 remains rejected because the exemplified LH322 inbred corn line is not described in the specification as comprising a gene conferring male sterility.

8. Claims 6, 12-18, 21, 24, 26-28, 30 and 31 remain rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. The claim(s)

contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. This rejection is repeated for the reason of record as set forth in the last Office action mailed 6 November 2003. Applicant's arguments filed 26 January 2004 have been fully considered but they are not persuasive.

Applicant argues that with regard to creation of male sterile plants, this is a technique that has been well known for decades, many years even before genetic transformation was known and that there is no reasonable basis has been provided as to why these well known techniques cannot be applied in the context of corn line LH322 (page 14 of the Response). This argument is not found to be persuasive because, claim 6 as amended, does not teach how to make and use the claimed male sterile corn plant. The specification gives general guidance on ingressing male sterility into the genetic background of a corn plant, use of gametocides and introduction of transgenes (pages 5-6 of the specification). The instant claim merely states that the corn plant is further defined as comprising a gene conferring male sterility wherein the exemplified LH322 inbred corn line is taught as being male fertile and the claim does not recite any limitation as to how the male sterility gene is introduced. In addition, the claim could be read as not further limiting the corn plant at claim 2 because the endogenous EPSPS gene could be interpreted as conferring male sterility when used in conjunction with the gametocide glyphosate. See *In re Fisher*, 166 USPQ 18, 24 (CCPA 1970) which teaches "That paragraph (35 USC 112, first) requires that the scope of the claims must

bear a reasonable correlation to the scope of enablement provided by the specification to persons of ordinary skill in the art. In cases involving predictable factors, such as mechanical or electrical elements, a single embodiment provides broad enablement in the sense that, once imagined, other embodiments can be made without difficulty and their performance characteristics predicted by resort to known scientific laws. In cases involving unpredictable factors, such as most chemical reactions and physiological activity, the scope of enablement obviously varies inversely with the degree of unpredictability of the factors involved.”.

Applicant argues that Hunsperger deals with petunias; Kraft with sugar beets and Eshed with tomatoes and that the relevance of the references to the claimed invention has therefore not been established, as is specifically required to demonstrate a *prima facie* case of non-enablement (page 15, 1st paragraph of the Response). This argument is not found to be persuasive because the references are cited as demonstrating the unpredictability of ingressing a trait from one plant to another plant using classical plant breeding methods in general.

Applicant argues that the Action has already acknowledged that the method of making a hybrid plant in claim 11 is enabled and that Claim 12 is directed the seed of claim 11, hence, the rejection must therefore fail on its face if the method of producing seed in claim 11 is enabled so is the seed produced by that method. Applicant further argues that the specification describes working examples showing the production of four hybrid plants, hence, there is no reasons have been presented to conclude why this does not show enablement of the claims (page 15, 2nd paragraph of the Response).

This argument is not found to be persuasive because the issue of enablement in the method claim 11 lies in the use of the exemplified inbred corn line LH322 in a cross with another inbred parent corn plant. In the instant issue as directed to claim 12, because Applicant has failed to adequately describe the genus of hybrid corn seed as outlined supra, Applicant has failed to teach one of ordinary skill in the art how to use the claimed hybrid corn seed as broadly claimed.

Applicant argues that claim 13 is directed to a plant produced by growing the seed of claim 12, as all that is required for this claim is mere germination of the seed in claim 12, this claim is also enabled and that claim 14 is directed to a seed produced by the plant of claim 13, which is inherently produced by growing the plant and is therefore also enabled (page 15, 3rd paragraph of the Response). This argument is not found to be persuasive for the reason given above.

Applicant argues that all that claim 15 requires is cross-pollinating the plant of claim 2 with any second plant, that there is no basis to conclude why one of skill in the art could not do this, and that the most basis plant breeding step, particularly in light of the allowance of claim 11. Applicant further argues that claim 16 is directed to a corn plant made by growing seed of claim 15, which again only requires generation of the seed and is enabled by claim 15 (page 15, 4th paragraph of the Response). This argument is not found to be persuasive for the reason given above.

At claims 17-18, Applicant argues that all that is required to complete the method is to follow the steps given in the claim, which themselves are known in the art and described in the specification, what was not known was the point of novelty, corn plant

LH322, which has already been acknowledged to be enabled as set forth above (page 16, 1st paragraph of the Response). This argument is not found to be persuasive because Applicant has failed to adequately teach one of skill in the art at the time of the invention how to use hybrid corn plants produced from the exemplified LH322 inbred corn line as broadly claimed, hence the instant claims lack adequate enablement. See *In re Fisher* cited above.

Applicant argues that claims 21, 24, 27 and 30-31 are all method claims that involve breeding corn plant LH322 according to the recited methods and that all that is required to complete the method is to follow the steps given in the claim, which themselves are standard in the art. Applicant argues that the only necessary starting material is corn plant LH322, which has already been acknowledged to be enabled as set forth above and while some of the steps involve use of a second corn plant, any different second corn plant can be used, what other plant or plants one chooses to cross with the claimed variety is therefore completely irrelevant to enablement, as any fertile corn plant could be used to produce an inbred corn plant derived from the corn line LH322. Applicant further argues that enablement only requires that one of skill in the art be able to make and use the claimed invention without undue experimentation (page 16, 2nd paragraph of the Response). These arguments are not found to be persuasive. The Examiner reiterates that the nature of the art at the time of Applicant's invention was such that one of skill in the art could not reasonably predict what the product of a cross between two inbred parental plants would be without a reduction to practice. The art teaches that based on the number of

segregating genes, the frequency of occurrence of any individual with a specific genotype is less than 1 in 10,000 and that even if the entire genotype of the parents has been characterized and the desired phenotype is known, only a few if any individuals having the desired genotype may be found in a large F_2 or S_0 population and that typically the genotype of neither the parents nor the desired genotype is known in detail (see Segebart, U.S. Patent 5,304,719, in particular the paragraph spanning columns 2-3). The art also teaches that the number of genes affecting the trait of primary economic importance in maize, grain yield, has been estimated to be in the range of 10-1000 and that inbred lines which are used as parents for breeding crosses differ in the number and combination of these genes (Segebart, U.S. Patent 5,367,109, column 2, lines 60-64). Segebart ('109) also teaches that one of the largest plant breeding programs in the world does not have a sufficiently large breeding population to be able to rely upon "playing the numbers" to obtain successful research results and that plant breeders use their skills, experience and intuitive ability to select inbreds having the necessary qualities (column 4, 1st and 2nd paragraphs). Hence, given the fact that one of skill in the art cannot reasonably predict the number of genes that affect the trait of just grain yield in the parental inbred lines of a hybrid maize plant, it is unclear how one of skill in the art could reasonably predict how to make and use the claimed maize plants and methods of making a maize plant using a second or filial non-exemplified maize plant produced from Applicant's exemplified hybrid maize plant without undue trial and error experimentation.

Applicant argues that with regard to claimed methods of corn breeding comprising use of LH322, corn breeding is also an extremely advanced and well known art, that this is due in large part to the fact that corn is one of the world's major food crops and largest seed crops that North American farmers alone plant tens of millions of acres of corn at the present time and there are extensive national and international commercial corn breeding programs (page 16, 3rd paragraph of the Response). This argument is not found to be persuasive and is addressed above.

Applicants argue that they have more than adequately enabled claim 26 because the specification provides corn line LH322, which will be deposited upon the indication of otherwise allowable subject matter, that the specification also describes numerous plant transformation techniques that are known in the art, and that the specification further describes numerous coding and regulatory sequences for transformation into corn plant LH322 using the transformation techniques described including numerous examples of plant disease resistance genes, *Bacillus thuringiensis* protein genes, genes that confer resistance to a herbicide, genes that confer or contribute to a value-added trait, inducible promoters, constitutive promoters, tissue-specific promoters, and signal sequences for targeting proteins to sub-cellular compartments (page 17 of the Response). This argument is not found to be persuasive because the instant claim is directed to introducing one or more transgenes into the exemplified LH322 inbred corn line, and is not limited to transgenes that are known to one of skill in the art at the time of Applicant's invention to produce useful traits in corn plants. In addition, introducing

multiple transgenes into a maize plant would compound the issue given the breadth of the claimed corn plant or parts thereof. See *In re Fisher* cited above.

Claim Rejections - 35 USC § 102/103

9. Claims 14-16 remain rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Kevern, U.S. Patent 5,850,009, issued 15 December 1998. This rejection is repeated for the reason of record as set forth in the last Office action mailed 6 November 2003. Applicant's arguments filed 26 January 2004 have been fully considered but they are not persuasive.

Applicant argues that the rejection is made based on the allegation that, depending upon what second corn plant one of skill in the art selected, the resulting corn seed and progeny could be genetically, morphologically and physiological indistinguishable from that of the instant claims but that what could happen is irrelevant. Applicant argues that under 35 U.S.C. § 102(b) it is the burden of the Office to show that each and every element as set forth in the claim is found in the prior art. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Applicant argues that this has not been done and the rejection must therefore fail (page 18, 2nd paragraph of the Response). Applicant has cited Miller, US Patent 5,545,811, while the instant claims are rejected over Kevern, US Patent 5,850,009. The Examiner views the error irrelevant to the arguments put forth by

Applicant, which are addressed herein. This argument is not found to be persuasive because the instant claims are directed to a progeny corn plant produced using a progeny of the exemplified LH322 inbred corn plant, wherein Applicant discloses phenotypic traits, or combination thereof, that are not deemed to be unique to said LH322 inbred corn plant (pages 9-12 of the specification). In the instant case, the Office does not have the resources to produce the myriad of combinations of progeny of the exemplified LH322 inbred corn plant and the prior art PH0HC inbred corn line disclosed by Kevern, produced by crossing with other inbred or non-inbred corn lines. The Office does not have the facilities and resources to provide the factual evidence needed in order to establish that the product of the prior art does not possess the same, material, structural and functional characteristics of the claimed product. In the absence of evidence to the contrary, the burden is on the Applicant to provide that the claimed product is different from those taught by the prior art and to establish patentable differences. See *In re Best* 562F.2d 1252 USPQ 430 (CCPA 1977) and *Ex parte Gray* 10 USPQ 2d 1922 (PTO Bd. Pat. App. & Int. 1989).

Applicant argues that to the extent that alleged unexpressed inherent characteristics form the basis of an anticipation rejection, it is noted by Applicants that these characteristics must necessarily flow from the disclosure and to serve as an anticipation when the reference is silent about the asserted inherent characteristic, such gap in the reference may be filled with recourse to extrinsic evidence. Applicant argues that such evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by

persons of ordinary skill, and that here all that is stated in the Action is that, under a hypothetical set of circumstances, the claims allegedly could be anticipated. However, the Action not only does not indicate that these circumstances ever have occurred prior to the filing of the application, there is not even a showing that such circumstances could occur or that a set of corn plants exist in the prior art that could be crossed to arrive at the claimed invention (paragraph spanning pages 18-19 of the Response). This argument is not found to be persuasive for the reasons given above. Given that the second parental corn plant would contribute to the phenotypic characteristics of the resultant progeny corn plant, a progeny of the F1 hybrid of Applicant's LH322 corn plant would be indistinguishable from an F1 hybrid of the PH0HC corn plant disclosed by Kevern or progeny thereof.

Applicant argues that for the purposes of obviousness under 35 USC § 103; (1) there must be some motivation or suggestion in the cited prior art or in the knowledge generally available to one of skill in the art to combine the teachings to arrive at the invention, (2) there must be a reasonable expectation of success and (3) the prior art must teach or suggest all claim limitations, and that all three of these criteria are missing in the instant rejection. Applicant argues that there is no motivation or suggestion in the prior art to arrive at the invention and no rationale for such a motivation has been alleged in the Action, the rejection thus relies on an "obvious to try" type rationale and second, one of skill in the art would have no reasonable expectation of success in selecting a second inbred corn plant to arrive at the invention (page 19 of the Response). These arguments are not found to be persuasive. As to the argument that

all three criteria must be present to support a *prima facie* case of obviousness in view of a reference, *Ex parte Anderson* 30 USPQ2d 1866, 1868 (BdPatApp&Int 1993) teaches that “obviousness may be found without “something specific in a prior art reference [which] would lead an inventor to combine the teachings therein with another piece of prior art”. In the instant case Kevern motivates one of ordinary skill in the art to make hybrid crosses using inbred maize line PH0HC (see claim 7). One of ordinary skill in the art at the time of Applicant’s invention would have had a reasonable expectation of success in making progeny corn plants. Kevern teaches what traits in a corn plant are desirable and that the goal of producing such corn plant is obvious (column 4, lines 23-29).

Double Patenting

10. Claim 10 objected to under 37 CFR § 1.75 as being a substantial duplicate of claim 5. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Conclusion

11. The rejection of claims 12 and 13 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Kevern, U.S. Patent 5,850,009, issued 15 December 1998 is withdrawn in view of Applicant’s arguments, which are found to be persuasive as directed to the instant claims.

12. The rejection of claim 28 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kevern, U.S. Patent 5,850,009, issued 15 December 1998, in view of Lundquist *et al*, U.S. Patent 5,508,468, issued 16 April 1996 is withdrawn in view of Applicant's arguments, which are found to be persuasive.

13. Claims 1-5, 7, 8, 11 and 19 are allowed.

14. Claims 6, 9, 10, 12-18, 21, 24, 26-28, 30 and 31 remain rejected.

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR § 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR § 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David H. Kruse, Ph.D. whose telephone number is (571) 272-0799. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Amy Nelson can be reached at (571) 272-0804. The fax telephone number for this Group is (703) 872-9306 Before Final or (703) 872-9307 After Final.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (571) 272-0547.


AU 1638

David H. Kruse, Ph.D.
12 April 2004